JC06 Rec'd PCT/PTO 03 OCT 2005

PTO-1390 (Rev. 12-2004)

Approved for use through 3/31/2007. OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

ATTORNEY'S DOCKET NUMBER NREL 01-14

CONCERNING A SUBMISSION UNDER 35 U.S.C. 371						
	IONAL APPLICATION NO. S01/49921	November 2001	PRIORITY DATE CLAIMED			
TITLE OF INVENTION DE A CITATE CO. DORING OF COATE COMPOLIND SEMICONDLICTORS						
REACTIVE CO-DOPING OF GaAlinP COMPOUND SEMICONDUCTORS APPLICANT(S) FOR DO/EO/US						
	COOPER HANNA AND ROB		O/US) the following items and other information:			
~~						
	This is a FIRST submission of items concerning a submission under 35 U.S.C. 371.					
2. L T	his is a SECOND or SUBSEQUENT su	ubmission of items concerning a submissio	n under 35 U.S.C. 371.			
	3. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.					
4. 🔲 7	The US has been elected (Article 31).					
5.	A copy of the International Application	as filed (35 U.S.C. 371(c)(2))				
	a. is attached hereto (required	only if not communicated by the Internation	nal Bureau).			
	b. has been communicated by	the International Bureau.				
	c. X is not required, as the applic	cation was filed in the United States Receiv	ing Office (RO/US).			
6.	An English language translation of the	e International Application as filed (35 U.S.	C. 371(c)(2)).			
	a. is attached hereto.					
	b. has been previously submit	tted under 35 U.S.C. 154(d)(4).				
7.	Amendments to the claims of the Inte	rnational Application under PCT Article 19	(35 U.S.C. 371 (c)(3))			
	a. are attached hereto (required only if not communicated by the International Bureau).					
	b. have been communicated	by the International Bureau.				
	c. have not been made; how	ever, the time limit for making such amend	ments has NOT expired.			
	d. Annual have not been made and will not be made.					
8.	An English language translation of the	ne amendments to the claims under PCT A	rticle 19 (35 U.S.C. 371(c)(3)).			
9.	An oath or declaration of the inventor	(s) (35 U.S.C. 371(c)(4)).				
10.	An English language translation of th Article 36 (35 U.S.C. 371(c)(5)).	e annexes of the International Preliminary	Examination Report under PCT			
Items I I to 20 below concern document(s) or information included:						
11. 🛛	An Information Disclosure Statement	under 37 CFR 1.97 and 1.98.				
12.	An assignment document for recording	ng. A separate cover sheet in compliance v	vith 37 CFR 3.28 and 3.31 is included.			
13. 🔲	A preliminary amendment.					
14.	An Application Data Sheet under 37 CFR 1.76.					
15.	A substitute specification.					
16.	A power of attorney and/or change o	f address letter.				
17.	A computer-readable form of the sec	quence listing in accordance with PCT Rule	13ter.2 and 37 CFR 1.821- 1.825.			
18.	A second copy of the published Inter	national Application under 35 U.S.C. 154(d	l)(4).			
19.	A second copy of the English langua	ge translation of the international application	on under 35 U.S.C. 154(d)(4).			
<i>∞</i> ⊠	Other items or information:					

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Page 1 of 2

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PTO-1390 (Rev. 12-2004)

Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB, control number.

U.S. APPLICAT	TION NO. (if	known, see 3	7 °FR 14) INTERNATIONAL AF	PPLICA	TION NO.	ATTORNEY'S DOCI	KET NUMBER
	10/	つり と、	LUZ	PCT/US01/49921			NREL 01-14	
21. The following							Applicant use	Office use only
a) Basic national fee\$300.00						\$300.00	\$ 300.00	
b) Examination fee\$200.00						\$ 200.00	 	
C) Search fee\$500.00						\$ 500.00		
		ABOVE CAI				\$`1000.00	\$ 1000.00	
Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.								
Total Sheets	Extra she	eets		Number of each additional 50 or fraction thereof (round up to a whole number)		RATE		
- 100 =		/50 =				x \$250.00	\$ O	
Surcharge of \$1 claimed priority of	30.00 for ful date (37 CF	rnishing the or R 1.492(e)).	ath or decl	aration later than 30 months t	from the	e earliest	\$	
CLAIMS		NUMBER FII	.ED	NUMBER EXTRA		RATE	\$	
Total claims	s	28.	- 20 =	8	×	\$50.00	\$ 400.00	
Independent cla	ims	3	-3=	0	×	\$200.00	\$	
MULTIPLE DEP	PENDENT C	LAIM(S) (if ap	plicable)		+	\$360.00	\$	
				TOTAL OF ABOVI			\$ 1400.00	
Applicant of by 1/2.	claims smal	entity status.	See 37 C	FR 1.27. The fees indicated a	ibove a	re reduced	\$ 700.00	
						SUBTOTAL=	\$ 700.00	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).								
TOTAL NATIONAL FEE = \$ 700.00								
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property								
TOTAL FEES ENCLOSED :						ENCLOSED :	\$ 700.00	
Amount to be refunded:					be refunded:		\$	
Amount to be charged						to be charged		s
a. A che	eck in the ar	nount of \$		to cover the at	ove fee	es is enclosed.		
b. Please charge my Deposit Account No. 14-0460 in the amount of \$ 700.00 to cover the above fees. A duplicate copy of this sheet is enclosed.								
c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-0460 A duplicate copy of this sheet is enclosed.								
d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.								
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.1 37(a) or (b)) must be filed and granted to restore the International Application to pending status.								
SEND ALL CORRESPONDENCE TO:								
Paul J. White								
NREL PAUL J. WHI					HITE_			
1617 Cole Blvd.								
Golden, CO 80401 30,436					TON NUMBER			
REGISTRATION NUMBER								

10/552102 JC06 Rec'd PCT/PTO 03 OCT 2005

The PTO did not receive the following listed item(s)

NO POST CARD

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	Mark Cooper Hanna et al.)
	•) Examiner: Not Yet Accorded
Serial No.:	PCT/US01/49921)
) Group Art: Not Yet Accorded
Filed:	November 8, 2001)
) Atty. Dkt. No. NREL 01-14
Title:	Reactive Co-Doping of GaAlInP)
	Compound Semiconductors)

CERTIFICATE OF MAILING UNDER 37 CFR § 1.8

I hereby certify that the following attached items:

- Petition for Revival of an International Application for Patent Designating the U.S. Abandoned Unintentionally Under 37 CFR § 1.137(b) [2 pages]
- Reply to Petition for Revival of Application [3 pages]
- Statement
- Transmittal Letter to the U.S. Designated/Elected Office [2 pages]
- Information Disclosure Statement [2 pages]
- Copy of Decision, dated 12 August 2005 [2 pages]
- Copy of PCT Inventors Declaration
- Notice of Incomplete NonProvisional Application
- Copy of Postcard Receipt, dated May 7, 2004
- Postcard Receipt

are being deposited in the United States Postal Service as first class mail, postage pre-paid, in an envelope addressed to: Commissioner for Patents, U.S. Patent & Trademark Office, P.O. Box 1450, MS Issue Fee, Alexandria, Va 22313-1450 on this 30th day of September 2005.

Brenda E. Brantley

Senior Patent Administrator

National Renewable Energy Laboratory 1617 Cole Boulevard Golden, CO 80401 303/384-7572 303/384-4799 (fax)

10/552102

JC12 Rac'd POT/TT 0 3 OCT 2005

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NREL 01-14

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The stamp of the U.S. Patent & Trademark Office hereon will acknowledge receipt of the following:



- Information Disclosure Statement, Form 1449 + Cited References
- Declaration for Utility or Design Patent Application [2 pages]

Recordation Cover Sheet + Assignment [4 pages]

Transmittal Letter to the United States Designated/Elected Office Concerning a Filing Under 35 USC 371 [2 pages]

Utility Patent Application Transmittal

Received

Re:

Inventors: Mark Cooper Hanna and Robert Reedy

Reactive Co-Doping of GaAlInP Compound MAY 2 0 2004 Title:

Semiconductors

· Legal Office

IN THE U.S. PATENT AND TRADEMARK OFFICE

inventor(s):	Mark W. Wanlass et al.)
)
Internationa	l (PCT) Application No.:)
	PCT/US01/49921)
)
Filed:	November 8, 2001)
	•)
Title:	Reactive Co-Doping of GaAlInP)
	Compound Semiconductors) Atty Dkt. No.: NREL 01-14

STATEMENT

Commissioner for Patents P.O. Box 1450 MS/PCT Alexandria, VA 22313-1450

Dear Sir:

The undersigned declares that the confusion created by the submittal of two transmittal forms at the original filing was unintentional.

The undersigned declares that all statements made herein are true and correct, and that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Respectfully submitted,

Dated: September $\cancel{20}$, 2005.

Paul J. White, Reg. No. 30,436

Attorney for Applicants

JC12 Rec'd PCT/PTC 0 3 OCT 2005



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE UNITED STATES DEFARTMENT OF COMMU United States Patient and Trademark Office Address COMMISSIONER FOR PATENTS P.C. Box 1450 Alexandria, Viginia 22313-1450 www.usplu.gov

FORMALITIES LETTER

APPLICATION NUMBER

FILING OR 371 (c) DATE

FIRST NAMED APPLICANT

ATTORNEY DOCKET NUMBER

10/844,463

05/07/2004

Mark Cooper Hanna

NREL01-14

CONFIRMATION NO. 6280

23712

PAUL J WHITE, SENIOR COUNSEL NATIONAL RENEWABLE ENERGY LABORATORY (NREL) 1617 COLE BOULEVARD GOLDEN, CO 80401-3393

Received

OC000000015461050

MAR 21 2005

Legal Office

Date Mailed: 03/15/2005

NOTICE OF INCOMPLETE NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

A filing date has NOT been accorded to the above-identified application papers for the reason(s) indicated below.

All of the items noted below and a newly executed oath or declaration covering the items must be submitted within TWO MONTHS of the date of this Notice, unless otherwise indicated, or proceedings on the application will be terminated (37 CFR 1.53(e)). Replies should be mailed to: Mail Stop Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450.

The filing date will be the date of receipt of all items required below, unless otherwise indicated. Any assertions that the item(s) required below were submitted, or are not necessary for a filing date, must be by way of petition directed to the attention of the Office of Petitions accompanied by the \$400.00 petition fee (37 CFR 1.17(f)). If the petition states that the application is entitled to a filing date, a request for a refund of the petition fee may be included in the petition. Petitions should be mailed to: Mail Stop Petitions, Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450.

- · The specification is missing.
- · The specification does not include at least one claim. A complete specification as prescribed by 35 U.S.C. 112 is required.
- The statutory basic filing fee is missing. Applicant must submit \$ 395 to complete the basic filing fee for a small entity.

SUMMARY OF FEES DUE:

Total additional fee(s) required for this application is \$395 for a Small Entity

• \$395 Statutory basic filing fee.

Replies should be mailed to:

Mail Stop Missing Parts

Commissioner for Patents

P.O. Box 1450

Alexandria VA 22313-1450

A copy of this notice <u>MUST</u> be returned with the reply.

Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 1 - ATTORNEY/APPLICANT COPY